

1 NOVEMBER 1997



Maintenance

AIRCRAFT EGRESS AND ESCAPE SYSTEMS

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the SAF/AAD WWW site at: <http://afpubs.hq.af.mil>. If you lack access, contact your Publishing Distribution Office (PDO).

OPR: HQ USAF/ILMM
(CMSgt Larry Funk)
Supersedes AFI 21-112, 1 June 1996.

Certified by: HQ USAF/ILMM
(Mr Edward Koenig)
Pages: 6
Distribution: F

This instruction implements AFI 21-1, *Air Force Maintenance Management*. It provides guidance and procedures for maintaining aircraft egress and escape systems. Specifically outlined are egress maintenance shop requirements, training and certification of egress maintenance personnel, extent of training given to non-egress maintenance personnel, inspection requirements for egress and escape systems, egress time change management, procedures and requirements for egress familiarization training for non-egress maintenance personnel, and training and certification of egress augmentees. This publication also applies to the Air National Guard (ANG).

SUMMARY OF REVISIONS

This revision updates paragraphs 3.2., 3.3., 4.1., 8.3., 10.1., 11.2., 11.3., 12., and the Glossary of Terms. A | indicates revisions from the previous edition.

1. Egress Maintenance:

- 1.1. Aircrew egress system personnel, AFSC 2A6X3, civilian equivalent, and augmentees are responsible for all egress systems maintenance, and must be certified before being authorized to maintain or inspect aircraft egress systems, to include personnel assigned to quality assurance (QA). Other maintenance personnel certified to perform crew chief duties may accomplish preflight and postflight inspections.
- 1.2. When inspection work cards specify egress personnel, AFSC 2A6X3 or civilian equivalent must accomplish the task.
- 1.3. Use Demand Response Team when directed by technical orders or any task requiring the removal/installation of explosive components. Compose teams of individuals who are certified to perform egress systems maintenance.

- One team member must be at least a fully qualified egress journeyman AFSC 2A653, or civilian equivalent.

1.4. When parachutes and survival kits are integral parts of the ejection seat, life support AFSC 1T1X1, or civilian equivalents may install and remove them providing they have completed the training and certification requirements outlined in paragraphs 5.2. and 8.

2. Facilities:

2.1. The installation commander will provide an enclosed shop facility, separated from other inhabited buildings or areas when practical, for off equipment egress systems maintenance.

2.2. Egress facilities should have limited access to ensure system integrity, and be properly licensed for the storage of explosive components.

2.3. Facility must be large enough to accommodate the average number of egress components requiring maintenance and storage at any one time.

3. Safety Requirements:

3.1. The egress shop supervisor will ensure all explosive components are properly handled, tagged, segregated and stored.

3.2. Use an enclosed vehicle to transport components. Vehicles and operators will meet all requirements listed in

AFMAN 91-201.

3.3. Strictly adhere to all safety requirements outlined in AFMAN 91-201, AFI 91-202, and technical orders 11A, 11P, and 13A series.

4. Personnel Training:

4.1. Aircrew egress systems personnel will meet mandatory training requirements contained in AFI 36-2108 and

AFI 91-202.

4.2. Train and certify all personnel performing egress systems maintenance and inspections as outlined in paragraphs 5. and 8.

5. Initial Certification:

5.1. Personnel must successfully complete an Air Education and Training Command (AETC) approved egress journeyman course for their specific aircraft.

5.2. All personnel will demonstrate adequate proficiency to either a certified egress element supervisor (AFSC 2A6X3), designated certifying official AFSC 2A690, or civilian equivalents.

5.3. Initially certify egress element supervisors by utilizing other certified seven levels who have attended the required course(s) or by a certified AETC instructor.

5.4. Contract maintenance organizations and DOD civilians may designate instructors to qualify their personnel if the instructor has completed a current AETC approved course for that specific aircraft, and has met initial certification requirements.

5.5. Units with unique, experimental, or test aircraft not available through AETC training must establish a training program to ensure compliance with this AFI.

- The program must provide for the required training by the most qualified personnel.
- Certification must be by the egress element supervisor, designated certifying official AFSC 2A690, or civilian equivalent to either.

6. Uncertified Personnel Utilization:

6.1. Newly assigned personnel holding AFSC 2A6X3 may assist in the performance of egress systems maintenance.

6.2. Certified egress specialist AFSC 2A6X3 will closely supervise uncertified personnel.

- Uncertified personnel may never clear corrected AFTO Form 781A, **Maintenance Discrepancy and Work Document**, entries.
- Schedule uncertified individuals for AETC approved aircraft egress systems courses for the assigned aircraft.

7. Decertification Procedures:

- Decertify any individual who fails to demonstrate adequate proficiency or who has a documented administrative action that could adversely affect job performance.

8. Recertification Procedures:

8.1. Recertify personnel except egress specialist (AFSC 2A6X3) at least every 18 months.

8.2. Conduct a practical evaluation by either a certified egress element supervisor (2A6X3), designated certifying official (AFSC 2A690), or civilian equivalent.

8.3. Retrain any individual who fails the practical evaluation according to AFI 36-2201.

9. Egress/Cockpit Familiarization:

9.1. All personnel other than egress personnel, AFSC 2A6X3, who access aircraft cockpits with egress systems must complete a general familiarization course annually.

9.2. An egress element supervisor validates all egress training materials annually. This includes safety device locations, hazards associated with the system, and certification/recertification plan of instruction.

9.3. Ideally, initial egress familiarization should be hands-on using the actual aircraft. New personnel to the unit must receive initial training regardless of previous aircraft experience.

9.4. This annual training is conducted only by highly qualified personnel, certified on assigned egress system (s).

9.5. Training conducted by personnel not identified in paragraph 1.1. must be certified/recertified by personnel identified in paragraph 5.2., semi-annually “as a minimum.”

9.6. Units will submit a certification/recertification plan of instruction as well as revisions to their MAJCOM Functional Manager for approval.

9.7. "Certification" will be documented in the individuals training record by identifying each item certified.

10. Training Documentation:

10.1. Certification, decertification, recertification, familiarization, and qualification training are documented in accordance with AFI 36-2201.

10.2. Document completion of an approved AETC egress journeyman course as outlined in 36- series AFIs.

11. Egress Systems Inspections and Documentation:

11.1. A certified seven or nine level egress craftsman will inspect any disturbed integral part of the egress system. The inspection must be an egress final inspection or as prescribed by technical data.

11.2. If an insufficient number of certified seven or nine level egress craftsman are assigned, the Group Commander may designate a highly qualified five level egress journeymen, in the rank of SrA or higher, to inspect and sign off completed egress maintenance. Waived 5-skill level personnel should be closely monitored and kept to the minimum required to accomplish the maintenance mission. The provisions in AFI 21-101, paragraph 3.6.3.3., do not apply to egress maintenance.

11.3. Conduct an egress final every 30 days on integral seats. Conduct an egress final after life support inspections when any maintenance beyond a visual inspection is performed on an integral component of an integral seat (for example, after the removal and installation of personnel parachutes and survival kits that are an integral part of the ejection seat).

11.4. Due to the critical nature of egress components and extensive records actions, relocation of any egress component will require cannibalization documentation.

12. Public Static Display:

- Safe aircraft placed on public static display according to the 00-80G series technical orders and AFMAN 91-201.

13. Training Aircraft:

- Safe aircraft utilized for local maintenance training and fire department training according to the type of training and hazards present.

14. Transient Aircraft Maintenance:

14.1. If an egress repair capability does not exist on base, request help from owning aircraft unit or nearest unit with the capability.

14.2. Aircrew members must remove and install flight status safety pins on aircraft when transient maintenance personnel are not qualified.

15. Time Change Item (TCI) Management:

15.1. The Egress Element NCOIC is responsible for the management, accuracy, and timely update of the TCI data base.

15.2. Units using the Core Automated Maintenance System (CAMS) will document all egress related TCI components in the egress configuration module of CAMS.

WILLIAM P. HALLIN, Lt General, USAF
DCS/Installations and Logistics

Attachment 1

GLOSSARY OF TERMS

Terms

Augmentee—Any non-2A6X3 AFSC that performs or assists in egress maintenance tasks.

Certification—A documented formal review of an individual's training and experience with demonstration of adequate task proficiency.

Civilian Equivalent—Any civilian who has completed all egress training as defined by the current 2A6X3 Career Field Education and Training Plan and occupies an egress AFSC duty position. A civilian who has completed all training; but, does not occupy an egress duty position is an augmentee.

Decertification—Documented removal of an individual's certification.

Demand Response Team—Two member team where one person reads technical order steps and the other performs the task and responds when step is completed.

Egress Final—Verification of total system integrity.

Egress Maintenance—Any action that changes the status or condition of an egress system. Excluded is the removal/installation of flight status safety pins, non integral personnel parachutes and survival kits.

Integral Part of Egress System—Any component physically attached to the egress system which if improperly installed would cause improper operation of the egress system.

Recertification—Revalidation of an individual's certification.

Safe—Actions necessary to prevent or interrupt complete operation of the escape system.